STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.:	MO-0122416
Owner:	Swinger Trucking, Inc.
Address:	11153 Highway 19, Cuba, MO 65453
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Prairie Valley Disposal Landfill
Address:	3975 Highway 19, Cuba, MO 65453
Legal Description:	Outfall #001: NW ¼, NE ¼, Sec. 12, T39N, R5W, Crawford County Outfall #002: SW ¼, SE ¼, Sec. 1, T39N, R5W, Crawford County
Receiving Stream:	Tributary to Prairie Creek (U)
First Classified Stream and ID:	Prairie Creek (C)(02059)
USGS Basin & Sub-watershed No.:	(07140103-090002)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

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This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

July 14, 2000
Effective Date

April 5, 2002
Revised

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

July 13, 2005
Expiration Date

Interim Director of Staff, Clean Water Commission

FACILITY DESCRIPTION (continued)

Outfall #001 – Stormwater runoff/sedimentation basin - SIC #4953
Design flow is 0.95 MGD. Actual flow is dependent upon precipitation. Monitor at overflow from sediment basin in the NW ¼, NE ¼, Sec. 12, T39N, R5W, Crawford County.

Outfall #002 – Reserved for future use North Borrow Area. This outfall is reserved for future use of the North Borrow Area for stormwater runoff/sedimentation basin. Monitor at overflow from sediment basin in SW ¼, SE ¼, Sec. 1, T39N, R5W, Crawford County.

Outfall #003 – This outfall is eliminated.

Downstream monitoring at downgradient property line in Unnamed Tributary to Prairie Creek located in NW ¼, NE ¼, Sec. 12, T39N, R5W, Crawford County.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/quarter**	instantaneous estimate
Rainfall	inches	*		*	daily measurement	***
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand$_5$	mg/L	60		45	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Conductivity (Specific Conductance)	micromhos /cm 25°C	*		*	once/quarter**	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab
Iron, Total Recoverable	mg/L	*		*	once/quarter**	grab
pH – Units	SU	****		****	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE July 28, 2002. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 (continued)						
Calcium	mg/L	*		*	once/year******	grab
Fluoride	ug/L	*		*	once/year******	grab
Total Hardness	ug/L	*		*	once/year******	grab
Barium, Total Recoverable	ug/L	*		*	once/year******	grab
Boron, Total Recoverable	ug/L	*		*	once/year******	grab
Cadmium, Total Recoverable	ug/L	*		*	once/year******	grab
Chromium, Total Recoverable	ug/L	*		*	once/year******	grab
Cobalt, Total Recoverable	ug/L	*		*	once/year******	grab
Copper, Total Recoverable	ug/L	*		*	once/year******	grab
Sodium, Total Recoverable	ug/L	*		*	once/year******	grab
Ammonia as N	mg/L	*****		*****	once/year******	grab
Nitrate and Nitrite as N	mg/L	*		*	once/year******	grab
Phosphorus, Total Recoverable	mg/L	*		*	once/year******	grab
Mercury, Total Recoverable	ug/L	*		*	once/year******	grab
Arsenic, Total Recoverable	ug/L	*		*	once/year******	grab
Lead, Total Recoverable	ug/L	*		*	once/year******	grab

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0122416

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 (continued)						
Selenium, Total Recoverable	ug/L	*		*	once/year******	grab
Silver, Total Recoverable	ug/L	*		*	once/year******	grab
Manganese, Total Recoverable	ug/L	*		*	once/year******	grab
Magnesium, Total Recoverable	ug/L	*		*	once/year******	grab
Zinc, Total Recoverable	ug/L	*		*	once/year******	grab
Antimony, Total Recoverable	ug/L	*		*	once/year******	grab
Beryllium, Total Recoverable	ug/L	*		*	once/year******	grab
Nickel, Total Recoverable	ug/L	*		*	once/year******	grab
Sulfate	mg/L	*		*	once/year******	grab
Thallium, Total Recoverable	ug/L	*		*	once/year******	grab
Total Organic Carbon	mg/L	*		*	once/year******	grab
Vanadium, Total Recoverable	ug/L	*		*	once/year******	grab
Oil and Grease	mg/L	15		10	once/year******	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2002. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

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PERMIT NUMBER MO-0122416

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Downstream Monitoring						
Ammonia nitrogen as N	mg/L			*	once/month	grab
Nitrate nitrogen as N	mg/L			*	once/month	grab
Dissolved Phosphorus as P	mg/L			*	once/month	grab
Temperature (degrees)	°C			*	once/month	grab
pH Units	SU			*	once/month	grab
Dissolved Oxygen	mg/L			*	once/month	grab
Total Suspended Solids	mg/L			*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE May 28, 2002.						
Whole Effluent Toxicity (WET) Test	% Survival	(Special Condition #9)			once/year in May	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE July 28, 2002.						

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980 , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** Once per quarter in the months of March, June, September, and December.

*** Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.

**** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

***** The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.

****** Samples to be taken in September.

C. SPECIAL CONDITIONS

1. Permittee shall develop and implement a Storm Water Pollution Prevention Plant (SWPPP) for the facility in accordance with the guidelines described in Storm Water Management For Industrial Activities, Developing Pollution Prevention Plans and Best Management Activities, EPA document number EPA 832-R-92-006, published by the USEPA, September 1992, or other appropriate guidelines. The SWPPP must be kept on site. The SWPPP must include:
   (a) A listing of Best Management Practices (BMPs) to be implemented at the facility to control and minimize the amount of potential contaminants that may contact storm water.
   (b) A schedule for implementing the BMPs.
   (c) A schedule for a monthly site inspection and brief written report or inspection log. The report or log should include observations and evaluations of BMP condition, effectiveness, deficiencies, and corrective measures to be taken. Inspection reports must be kept on site and made available to MDNR personnel upon request.
   (d) A provision to designate an individual as responsible for environmental matters.
   (e) A provision for training all involved personnel in material handling and storage, and housekeeping of maintenance areas.

2. This permit may be reopened and modified, or alternatively revoked and reissued, to:
   (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
      (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
      (2) controls any pollutant not limited in the permit.
   (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
   (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

3. All outfalls must be clearly marked in the field.

4. Permittee will cease discharge by connection to areawide wastewater treatment system within 180 days of notice of its availability.

5. Changes in Discharges of Toxic Substances

   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established in Part A of the permit by the Director.
   (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

C. SPECIAL CONDITIONS (continued)

6. Report as no-discharge when a discharge does not occur during the report period.

7. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
   (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
   (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
   (e) There shall be no significant human health hazard from incidental contact with the water;
   (f) There shall be no acute toxicity to livestock or wildlife watering;
   (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

8. Lagoons and earthen basins shall have a liner that is designed, constructed and maintained in accordance with 10 CSR 20-8.020(13)(A)4. If operating records indicate, excessive percolation, the department may require a water balance test in accordance with 10 CSR 20-8.020(16) or other investigations to evaluate adequacy of the lagoon seal. The department may require corrective action as necessary to eliminate excess leakage.

9. Whole Effluent Toxicity (WET) tests will be conducted as follows:

SUMMARY OF WET TESTING FOR THIS PERMIT				
OUTFALL	A.E.C. %	FREQUENCY	SAMPLE TYPE	MONTH
Downstream monitoring point	100%	once/year	grab	May

   a. Test Schedule and Follow-Up Requirements
      (1) Perform a single-dilution test in the months and at the frequency specified above.
      If the test passes the effluent limit do not repeat test until the next test period. Submit results with the annual report.
      If the test fails the effluent limit a multiple dilution test shall be performed
      within 30 days, and biweekly thereafter until one of the following conditions are met:
      (a) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
      (b) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.

C. SPECIAL CONDITIONS (continued)

9. Whole Effluent Toxicity (WET)(continued)

a. Test Schedule and Follow-Up Requirements (continued)

(2) The permittee shall submit a summary of all test results for the test series to the Planning Section of the WPCP, DNR, Box 176, Jefferson City, MO within 14 days of the third failed test. DNR will contact the permittee with initial guidance on conducting a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE). The permittee shall submit a plan for conducting a TIE or TRE to the Planning Section of the WPCP within 60 days of the date of DNR's letter. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.

(3) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.

(4) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in part b.(1) will be required during this period.

(5) In addition to the WET test summary report required in part (2), all failing test results shall be reported to DNR within 14 days of the availability of results.

(6) All WET test results for the reporting period shall be summarized and submitted to DNR by the end of the following October. When WET test sampling is required to run over one DMR period, each DMR report shall contain information generated during the reporting period.

b. PASS/FAIL procedure and effluent limitations

(1) To pass a single-dilution test, mortality observed in the AEC test concentration shall not be significantly different (at the 95% confidence level; $p = 0.05$) than that observed in the upstream receiving-water control. The appropriate statistical tests of significance will be those outlined in the most current USEPA acute toxicity manual or those specified by the MDNR.

(2) To pass a multiple-dilution test:

(a) the computed percent effluent at the edge of the zone of initial dilution (AEC) must be less than three-tenths (0.3) of the LC_{50} concentration for the most sensitive of the test organisms, or,
(b) all dilutions equal to or greater than the AEC must be nontoxic. Failure of one multiple-dilution test is considered an effluent limit violation.

c. Test Conditions

(1) Test species: Ceriodaphnia dubia and fathead minnows, Pimephales promelas. Organisms used in WET testing should come from cultures reared for the purpose of conducting toxicity tests and should be cultured in a manner consistent with the most current USEPA guidelines. All test animals should be cultured as described in EPA-600/4-90/027.

C. SPECIAL CONDITIONS (continued)

9. Whole Effluent Toxicity (WET) (continued)

c. Test Conditions (continued)

(2) Test period: 48 hours at the "Acceptable Effluent Concentration" (AEC) specified above.

(3) When dilutions are required, upstream receiving stream water will be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used. Procedures for generating reconstituted water will be supplied by the Department of Natural Resources (DNR).

(4) Tests should be initiated immediately after the sample is collected, but tests must be initiated no later than 36 hours after collection.

(5) Single-dilution tests will be run with:

(a) Effluent at the AEC concentration;
(b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and
(c) reconstituted water.

(6) Multiple-dilution tests will be run with:

(a) 100%, 50%, 25%, 12.5%, and 6.25% effluent, unless the AEC is less than 25% effluent, in which case dilutions will be 4 times the AEC, two times the AEC, AEC, 1/2 AEC and 1/4 AEC.
(b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and
(c) reconstituted water.

(7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.

10. All design and operating specifications and all Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of this permit without regard to other conditions, permits occurrences, etc.

11. This permit does not allow discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications (with conditions).

12. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.

SUMMARY OF TEST METHODOLOGY FOR WHOLE-EFFLUENT TOXICITY TESTS

Whole-effluent-toxicity test required in NPDES permits shall use the following test conditions when performing single or multiple dilution methods. Any future changes in methodology will be supplied to the permittee by the Missouri Department of Natural Resources (MDNR). Unless otherwise specified by MDNR, procedures should be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027.

Test conditions for Ceriodaphnia dubia:

Test duration:	48 h
Temperature:	25 ± 2°C
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light, 8 h dark
Size of test vessel:	30 mL (minimum)
Volume of test solution:	15 mL (minimum)
Age of test organisms:	<24 h old
No. of animals/test vessel:	5
No. of replicates/concentration:	4
No. of organisms/concentration:	20 (minimum)
Feeding regime:	None (feed prior to test)
Aeration:	None
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Mortality (Statistically significant difference from upstream receiving water control at p≤ 0.05)
Test acceptability criterion:	90% or greater survival in controls

Test conditions for (Pimephales promelas):

Test duration:	48 h
Temperature:	25 ± 2°C
Light Quality:	Ambient laboratory illumination
Photoperiod:	16 h light/ 8 h dark
Size of test vessel:	250 mL (minimum)
Volume of test solution:	200 mL (minimum)
Age of test organisms:	1-14 days (all same age)
No. of animals/test vessel:	10
No. of replicates/concentration:	4 (minimum) single dilution method 2 (minimum) multiple dilution method
No. of organisms/concentration:	40 (minimum) single dilution method 20 (minimum) multiple dilution method
Feeding regime:	None (feed prior to test)
Aeration:	None, unless DO concentration falls below 4.0 mg/L; rate should not exceed 100 bubbles/min.
Dilution water:	Upstream receiving water; if no upstream flow, synthetic water modified to reflect effluent hardness.
Endpoint:	Mortality (Statistically significant difference from upstream receiving water control at p≤ 0.05)
Test Acceptability criterion:	90% or greater survival in controls